



UNITED STATES PATENT AND TRADEMARK OFFICE

T-D

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|---|-------------|----------------------|----------------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/566,705 | 02/01/2006 | Akira Ichikawa | Q92872 | 8042 |
| 65565 7590 01/11/2007 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213 | | | EXAMINER CHUNG, EUN HEE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2123 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 01/11/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/566,705

Applicant(s)

ICHIKAWA ET AL.

Examiner

Eun H. Chung

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/01/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-6 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement filed 02/01/2006 is being considered by the examiner. However, the references 8-241338, 11-120000, 2002-318891, 2003-296383 have not been considered because the translation was not submitted.

Claim Objections

3. Claims 1-6 are objected to because of the following informalities:

As per claims 2, 4, and 6, the word "A" at the beginning of claims would be better as "The".

As per claim 2, the comma is missing before "and" in line 4.

As per claims 1, 3, and 5, the claim recites the word "good", and it is not clear what a "good" design refers.

As per claims 1, 3, and 5, the phrase "design requirement particulars" and "designer discretion particulars render the claims indefinite because it is unclearly defined how "design requirement particulars" is different from "designer discretion particulars".

As per claims 3 and 5, "previously storing a design rule" and "previously storing a determination" render the claims indefinite because it is unclear how they are different from each other.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1-6, the claim appear inaccurate or lacking an essential step to be complete. The claims recite the “design result determination” step in line 16 (Claims 1, 3), line 3-4 (Claim 2), line 4 (Claim 4), and line 17 (Claim 5), but not how the design result determination step is performed. It is still unclear how the step of “design result determination” constitutes a “updating the design rule” in line 5 (Claim 2), line 5 (Claim 4), and line 6 (Claim 6).

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 5-6 are rejected under 35 U.S.C. 101 because they are non-statutory.

They are at best computer program software, per se, lacking the necessary hardware to fall into a statutory category of invention.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being anticipated by Li (US Patent No. 6,915,252).

Li teaches (Claims 1, 3, and 5) an automated design method and system (Col. 1 lines 7-10, Col. 4 line 45) for performing automated design of a product using design requirement particulars required with respect to the product targeted for the automated design (Col. 1 lines 14-43), designer discretion particulars by discretion of a designer with respect to design of the product (Col. 10 lines 45-61) and a design rule necessary for the design of the product (Col. 4 lines 46-62), characterized by comprising:

design rule storage means for storing the design rule (Col. 4 lines 45-61, Col. 5 lines 50-67, Col. 6 lines 1-11, Col. 11 lines 18-55),

automated design means (Col. 4 lines 44-45) for performing automated design using the design requirement particulars, the designer discretion particulars and the design rule (Col. 4 lines 44-61, Col. 10 lines 45-61, Col. 11 lines 18-55),

determination rule input means for inputting a determination rule including a rule to be satisfied by design of the product in the case of manufacturing the product (Col. 4 lines 45-61, Col. 7 lines 42-61, Col. 9 lines 15-40),

determination rule storage means for storing the determination rule (Col. 4 lines 45-61), and

Art Unit: 2123

design result determination means for determining whether a design result obtained by the automated design means is good or not based on the determination rule stored in the determination rule storage means (Col. 4 lines 45-61, Col. 6 lines 59-67, Col. 7 lines 42-61, Col. 9 lines 15-40); and

(Claim 3 and 5) a design requirement particular input step of inputting design requirement particulars required with respect to the product (Col. 5 lines 50-67, Col. 6 lines 50-59, Col. 11 lines 18-55),

a designer discretion particular input step of inputting designer discretion particulars by discretion of a designer with respect to design of the product (Col. Col. 10 lines 45-61),

(Claims 2, 4, and 6) determination result storage means for storing a determination result obtained by the design result determination means, and

the design rule stored in the design rule storage means is updated based on the determination result (Col. 9 lines 30-40, Col. 11 lines 35-55, Col. 13 lines 50-65).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanabe et al. (U. S. Patent No. 6,247,006) discloses an automatic programming method for punch press.

Rees et al. (U. S. Pub No. 2005/0159936) discloses an optimisation of the design of a component.

Art Unit: 2123

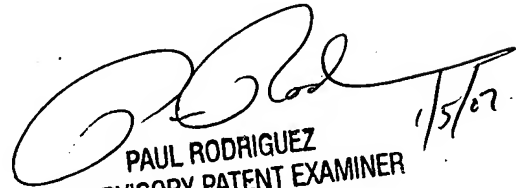
Pinfold et al. discloses a application of knowledge based engineering techniques to the finite element mesh generation (The Application of Knowledge Based Engineering Techniques to the Finite Element Mesh Generation of an Automotive Body-in-white Structure).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eun H. Chung whose telephone number is 571-272-2164. The examiner can normally be reached on 8:30am-5:00pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EHC


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
1/5/07